

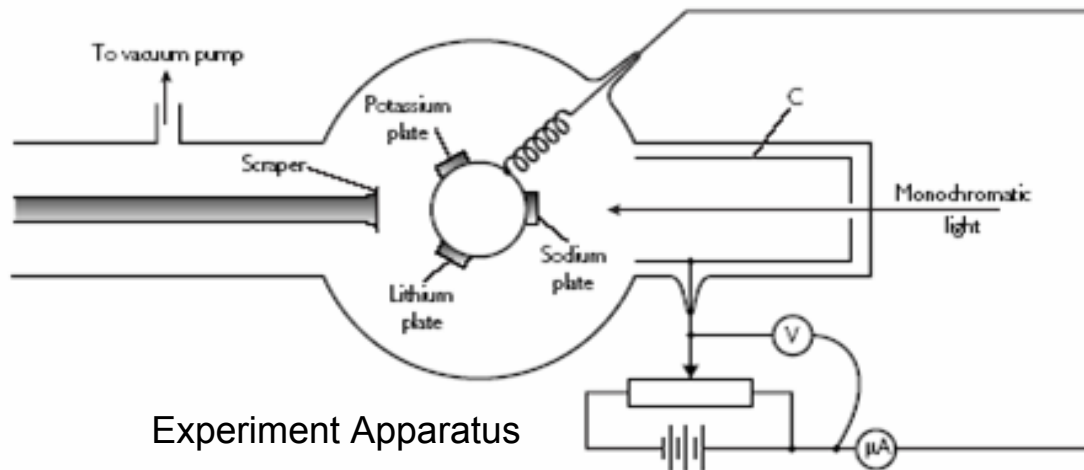
# 1916: Confirmation of Einstein's Photon Theory



Robert Millikan

-Millikan was awarded the Nobel prize in Physics in 1923 “for his work on the elementary charge of electricity and on the photoelectric effect”. The first was done by his famous “Oil Drop” experiment.

-The latter was proved using the apparatus below. Monochromatic light of varying frequencies was incident on each of the newly cleaned metal plates in turn. The resulting photoelectrons were collected by an electrode and flowed back to the plate assembly. Millikan then found the potential difference that was just large enough to stop the electron moving around the circuit. The resulting Voltage by Frequency graph was a straight.



-Though this confirmed Einstein's theory, even up to 1916 Millikan continued to deny the Photoelectric effect. Despite his stubbornness, his proof led people to accept the dual nature of light.